

ESF Coordinator:

Department of Energy

Primary Agency:

Department of Energy

Support Agencies:

Department of Agriculture
Department of Commerce
Department of Defense
Department of Homeland Security
Department of the Interior
Department of Labor
Department of State
Department of Transportation
Environmental Protection Agency
Nuclear Regulatory Commission
Tennessee Valley Authority

INTRODUCTION

Purpose

Emergency Support Function (ESF) #12 – Energy is intended to facilitate the restoration of damaged energy systems and components when activated by the Secretary for incidents requiring a coordinated Federal response. Under Department of Energy (DOE) leadership, ESF #12 is an integral part of the larger DOE responsibility of maintaining continuous and reliable energy supplies for the United States through preventive measures and restoration and recovery actions.

Scope

ESF #12 collects, evaluates, and shares information on energy system damage and estimations on the impact of energy system outages within affected areas. Additionally, ESF #12 provides information concerning the energy restoration process such as projected schedules, percent completion of restoration, geographic information on the restoration, and other information as appropriate. ESF #12 facilitates the restoration of energy systems through legal authorities and waivers. ESF #12 also provides technical expertise to the utilities, conducts field assessments, and assists government and private-sector stakeholders to overcome challenges in restoring the energy system.

The term “energy” includes producing, refining, transporting, generating, transmitting, conserving, building, distributing, maintaining, and controlling energy systems and system components. All energy systems are considered critical infrastructure.

Policies

ESF #12:

- Addresses significant disruptions in energy supplies for any reason, whether caused by physical disruption of energy transmission and distribution systems, unexpected operational failure of such systems, or unusual economic or international political events.
- Addresses the impact that damage to an energy system in one geographic region may have on energy supplies, systems, and components in other regions relying on the same system. Consequently, energy supply and transportation problems can be intrastate, interstate, and international.

- Performs the Federal coordination role for supporting the energy requirements associated with National Special Security Events.
- Is the primary point of contact with the energy industry for information sharing and requests for assistance from private- and public-sector owners and operators.
- Maintains lists of energy-centric critical assets and infrastructures, and continuously monitors those resources to identify and mitigate vulnerabilities to energy facilities.
- Establishes policies and procedures regarding preparedness for attacks to U.S. energy sources and response and recovery due to shortages and disruptions in the supply and delivery of electricity, oil, natural gas, coal, and other forms of energy and fuels that impact or threaten to impact large populations in the United States.

Restoration of normal operations at energy facilities is the responsibility of the facility owners.

For those parts of the Nation's energy infrastructure owned and/or controlled by DOE, DOE undertakes all preparedness, response, and recovery activities.

The Cyber Incident Annex to the National Response Framework outlines the provision of Federal cyber incident response coordination among the Federal departments and agencies in response to cyber-related issues.

CONCEPT OF OPERATIONS

ESF #12 provides the appropriate supplemental Federal assistance and resources to enable restoration in a timely manner.

Collectively, the primary and support agencies that comprise ESF #12:

- Serve as the focal point within the Federal Government for receipt of information on actual or projected damage to energy supply and distribution systems and requirements for system design and operations, and on procedures for preparedness, recovery, and restoration.
- Advise Federal, State, tribal, and local authorities on priorities for energy restoration, assistance, and supply.
- Assist industry, State, tribal, and local authorities with requests for emergency response actions as required to meet the Nation's energy demands.
- Assist Federal departments and agencies by locating fuel for transportation, communications, emergency operations, and national defense.
- Provide guidance on the conservation and efficient use of energy to Federal, State, tribal, and local governments and to the public.
- Provide assistance to Federal, State, tribal, and local authorities utilizing Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA)-established communications systems.

1 **ORGANIZATION**

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3 **Headquarters**

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5 ESF #12 is coordinated through Headquarters DOE. ESF #12 is activated when DHS/FEMA
6 notifies the 24-hour Headquarters DOE Emergency Operations Center.
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8 When activated by DHS/FEMA, ESF #12 provides representatives to the DHS National
9 Operations Center, Domestic Readiness Group, and National Response Coordination Center
10 (NRCC).
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12 **Regional-Level ESF #12 Support**

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14 ESF #12 assigns regional coordinators to each of the 10 DHS/FEMA regions. These
15 coordinators attend meetings, participate in exercises, and develop expertise on regional issues
16 and infrastructure.
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18 ESF #12 participates in Regional Interagency Steering Committee preparedness and
19 coordination activities.
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21 When activated by DHS/FEMA, ESF #12 representatives deploy to the Regional Response
22 Coordination Center (RRCC). The ESF #12 Team Leader at the RRCC coordinates assignments,
23 actions, and other support until the Joint Field Office (JFO) is established and mission-execution
24 responsibilities are transferred to the JFO ESF #12 Team Leader. ESF #12 provides incident-
25 related reports and information to ESF #5 – Emergency Management.
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27 **Field-Level ESF #12 Support**

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29 When activated by DHS/FEMA, ESF #12 representatives also deploy as members of incident
30 management teams.
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32 When activated by DHS/FEMA, ESF #12 representatives can also deploy as members of the
33 Rapid Needs Assessment Team.
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35 When activated by DHS/FEMA, ESF #12 personnel deploy to the JFO.
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37 **State and Local**

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39 State and local governments have primary responsibility for prioritizing the restoration of
40 energy facilities. State and local governments are fully and consistently integrated into ESF
41 #12 operations. When activated, ESF #12 personnel may deploy to State emergency
42 operations centers.
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44 **Private Sector**

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46 ESF #12 coordinates information and requests for assistance with the following private-sector
47 entities: the electricity and the oil and natural gas sector coordinating councils, the Electric
48 Reliability Organization, and various associations that represents portions of the energy sector.
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ACTIONS

Preincident

In cooperation with the Energy Sector, ESF #12 develops and implements methodologies and standards for physical, operational, and cyber security for the energy industry.

ESF #12 conducts energy emergency exercises with the energy industry, Federal partners, States, and local governments to prepare for energy and other emergencies.

The private sector owns and operates the majority of the Nation's energy infrastructure and participates along with the DOE in developing best practices for infrastructure design and operations.

DOE assists the States in the preparation of State Energy Assurance Plans to improve the reliability and resiliency of the Nation's energy systems.

ESF #12 works with the DHS/FEMA regions, private sector, and States to develop procedures and products that improve situational awareness to effectively respond to a disruption of the energy sector.

DOE monitors the energy infrastructure and shares information with Federal, State, tribal, local, and industry officials.

In anticipation of a disruption to the energy sector, DOE analyzes and models the potential impacts to the electric power, oil, natural gas, and coal infrastructures; analyzes the market impacts to the economy; and determines the effect the disruption has on other critical infrastructures and key resources.

Incident

The private sector normally takes the lead in the rapid restoration of infrastructure-related services after an incident occurs. Appropriate entities of the private sector are integrated into ESF #12 planning and decisionmaking processes.

Upon activation of ESF #12, DOE Headquarters establishes the Emergency Management Team and activates DOE disaster response procedures.

DOE assesses the energy impacts of the incident, provides analysis of the extent and duration of energy shortfalls, and identifies requirements to repair energy systems.

In coordination with DHS and State, tribal, and local governments, DOE prioritizes plans and actions for the restoration of energy during response and recovery operations.

ESF #12 coordinates with other ESFs to provide timely and accurate energy information, recommends options to mitigate impacts, and coordinates repair and restoration of energy systems.

ESF #12 facilitates the restoration of energy systems through legal authorities and waivers.

DOE provides subject-matter experts to the private sector to assist in the restoration efforts. This support includes assessments of energy systems, latest technological developments in advanced energy systems, and best practices from past disruptions.

ESF #12 coordinates preliminary damage assessments in the energy sector to determine the extent of the damage to the infrastructure and the effects of the damage on the regional and national energy system.

Within the JFO, ESF #12 serves as the primary source for reporting of critical infrastructure and key resources (CI/KR) damage and operating status for the energy systems within the impacted area. The Infrastructure Liaison, if assigned, proactively coordinates with ESF #12 on matters relating to security, protection, and/or restoration that involve sector-specific, cross-sector, or cascading effects impacting ESF #12. (See the CI/KR Support Annex for further details.)

DOE coordinates the installation, operation and fueling, and removal of generators at: farm locations; veterinary facilities, animal shelters, or other animal facilities that are considered vital to community emergency services; and when needed, to public zoos and laboratory animal facilities that are without power.

Postincident

ESF #12 participates in postincident hazard mitigation studies to reduce the adverse effects of future disasters.

ESF #12 assists DHS/FEMA in determining the validity of disaster-related expenses for which the energy industry is requesting reimbursement based upon the Stafford Act.

DOE leads and participates in various best practices and lessons learned forums to ensure future disruptions are addressed in the most efficient manner possible.

In coordination with the Office of Pipeline Safety of the Department of Transportation, ESF #12 ensures the safety and reliability of the Nation's natural gas and hazardous material pipelines.

RESPONSIBILITIES

Primary Agency: DOE

- Serves as the focal point for issues and policy decisions relating to energy response and restoration efforts.
- Assesses energy system damage and monitors repair work.
- Collects, assesses, and provides information on energy supply, demand, and market impacts; and contributes to situation and after-action reports.
- Identifies supporting resources needed to restore energy systems.
- Deploys DOE response teams as needed to affected area(s) to assist in response and restoration efforts.
- Reviews and sponsors the energy industry's requests for Telecommunications Service Priority (TSP) assignments to provision new services.

1 **SUPPORT AGENCIES**

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Agency	Functions
Department of Agriculture	Rural Utilities Service (RUS) <ul style="list-style-type: none"> Provides advice regarding the restoration of electrical power in RUS-financed systems. This advice includes estimating system damage and the need for local assistance. Provides emergency credit to RUS-financed rural electrification systems.
	Department of Agriculture, Multifamily Housing: Identifies owners of available apartments in federally funded multifamily housing to provide shelter to emergency response personnel proximal to an electric incident venue.
Department of Commerce/National Oceanic and Atmospheric Administration	Provides current and forecast weather for the incident location.
Department of Defense/U.S. Army Corps of Engineers	Coordinates Emergency Power team missions with power-system restoration activities to establish priorities for emergency generator installation.
Department of Homeland Security	Office of Infrastructure Protection (OIP) <ul style="list-style-type: none"> Provides management of the National Infrastructure Protection Plan. Provides overall coordination of the Nation's CI/KR mission area. Manages the National Infrastructure Coordinating Center, the National Asset Data Base, the National Infrastructure Simulation and Analysis Center, and the Homeland Infrastructure Threat Reporting and Analysis Center (in coordination with DHS/Office of Information and Analysis). Manages a nationwide organization of Protective Security Advisors. Trains and deploys Infrastructure Liaisons and Advisors to support incident management activities. (See the CI/KR Support Annex for further detail.) Develops and maintains a critical infrastructure list of energy facilities. Develops and maintains a critical assets list of energy facilities. Identifies and publicizes threats to specific energy facilities. Coordinates with DOE and the private sector to conduct vulnerability assessments on energy infrastructure associated with terrorism, and coordinates the implementation of protective measures. Coordinates with the Infrastructure Liaison concerning all issues dealing with the recovery and restoration of the associated critical infrastructure sector, including the allocation and prioritization of resources.
	National Communications System <ul style="list-style-type: none"> Through ESF #2 – Communications, assists DOE in its efforts to aid the energy industry in providing new services or to restore existing services that are assigned TSP restoration priorities. Assesses damage to telecommunications identified by DOE as essential for energy system restoration (electrical service priorities).
	Science and Technology Directorate: Provides coordination of Federal science and technology resources as described in the Science and Technology Support Annex.

Emergency Support Function #12 – Energy Annex

Agency	Functions
Department of the Interior	Bureau of Land Management <ul style="list-style-type: none"> Provides information on energy production and supply on onshore Federal lands. Assesses damage to energy-related infrastructure. Provides engineering and technical support as necessary. Develops and maintains information on critical energy-related infrastructure on Federal and tribal lands.
	Bureau of Reclamation <ul style="list-style-type: none"> Provides technical assistance for the assessment of hydroelectric facilities and flood control actions as they affect energy production. Uses Bureau of Reclamation personnel to assist in the repair of damaged hydropower generation facilities. Modifies operations at Bureau of Reclamation facilities to increase electrical generation to supplement losses in areas affected by an incident. Uses hydroelectric plant internal restart capabilities to assist in restoring the power system if blackouts occur.
	Minerals Management Service <ul style="list-style-type: none"> For Outer Continental Shelf (OCS) facilities, provides energy production and well reserve information. Assesses energy production damage and projected repair schedules for offshore facilities. Assists operators in minimizing the disruption of energy production by expediting review and approval of repair procedures for damaged facilities and/or in the prompt review and approval of proposals to resume production through the temporary rerouting of oil and gas production until permanent system(s) repair can be affected. Provides engineering and technical support as necessary. Assists DHS/U.S. Coast Guard in the development of critical asset list of OCS oil and gas facilities. Monitors and updates critical asset list of OCS oil and gas facilities.
Department of Labor/Occupational Safety and Health Administration	Implements processes identified in the Worker Safety and Health Support Annex to provide technical assistance during the restoration of the Nation's energy systems.
Department of State	<ul style="list-style-type: none"> Coordinates with foreign nations and international organizations for assistance and information regarding energy supply and system damage. Assists in implementation of emergency-related international energy agreements.

Emergency Support Function #12 – Energy Annex

Agency	Functions
Department of Transportation	<p>ESF #1: Assists with transportation of DOE and ESF #12 personnel, energy restoration equipment, spare parts, and repair personnel to disaster locations. ESF #1 – Transportation provides transportation infrastructure situational awareness and planning information to Federal, State, tribal, and local planners and response organizations.</p>
	<p>Pipeline and Hazardous Material Safety Administration (PHMSA): PHMSA's Office of Pipeline Safety (OPS) is the Federal safety authority for the Nation's natural gas and hazardous liquid pipelines and liquefied natural gas facilities. OPS:</p> <ul style="list-style-type: none"> • Ensures the safe, reliable, and environmentally sound operation of the Nation's pipeline transportation system. • Responds to requests for waivers of restrictions to meet emergency energy delivery requirements. • In coordination with DOE's Office of Electricity Delivery and Energy Reliability, coordinates activities and shares information needed to ensure that the sectors of the energy infrastructure subject to each agency's jurisdiction or oversight can efficiently and effectively coordinate and integrate energy assurance activities. • PHMSA's Office of Hazardous Material Safety assists State, tribal, and local authorities with requests for special permits and approvals relating to the movement of hazardous materials in support of the Nation's energy demands.
	<p>Maritime Administration (MARAD): Acts as the center for information on the location, capacity, and availability of U.S.-flag vessels suitable for the movement of energy supplies, including petroleum products and liquefied natural gas. Pursuant to a memorandum of agreement, coordinates with DOE and DHS/Customs and Border Protection on whether national defense considerations warrant waiver of the U.S. Cabotage law for the movement of energy supplies.</p>
Environmental Protection Agency (EPA)	<ul style="list-style-type: none"> • Responds to requests from State and local officials for EPA to exercise enforcement discretion to waive environmental requirements for motor vehicle fuel in order to address supply shortages, normally in the context of natural disasters or significant disruptions in the fuel production or distribution systems. • Coordinates the collection of motor vehicle fuel supply information necessary to evaluate an enforcement discretion request. • Issues enforcement discretions where appropriate to address fuel supply shortages. • Assists in identifying critical water and wastewater systems requiring priority power restoration.
Nuclear Regulatory Commission	<ul style="list-style-type: none"> • Regulates the Nation's civilian use of nuclear fuels and materials to include commercial nuclear power plants. • Provides information and technical assessment regarding nuclear power plants.
Tennessee Valley Authority	<ul style="list-style-type: none"> • Assesses supply, system damage, and repair requirements within the Tennessee Valley Authority. • Supplies surplus power as required to the power grid. • Supplies critical replacement parts and equipment as requested. • Supplies technical expertise as requested.